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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,534	11/21/2001	David M. Baylon	GIC-635	2611

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EXAMINER	
SENFI, BEHROOZ M	
ART UNIT	**PAPER NUMBER**
2613	

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/990,534	BAYLON ET AL.	
	Examiner	Art Unit	
	Behrooz Senfi	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *8/30/2004, fwd. 11/18/2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and arguments filed 8/30/2004, have been fully considered but are not persuasive. Applicant's amends independent claims 1, 15 and 27.

Response to remarks:

Applicant asserts (page 10, lines 1 – 3 of remarks, filed 8/30/2004) that Keith does not disclose or remotely suggest to re-encode a video segment if it cannot be decoded within a predetermined decode time period.

Examiner respectfully disagrees with applicant: Keith discloses/teaches decoding video signal with respect to allowed decoding time (col. 10, lines 29 – 40), and also teaches detection of the oversize frames, which actually takes more time for decoding and may exceeds the allowed decoding time. Therefore sends a signal, requesting that the frame be recompressed harder (col. 36, lines 31 – 34). Although Keith (page 10, lines 36 – 37) mentioned that there is no need to repeat compression/re-encode, even if it exceeds the decoding time. However the above statement by it self is a proof of indication of well-known re-encoding video signal based on allowed decoding time in the prior art of the record.

As for applicant (page 10, 23 – 25 of remarks) requesting examiner to provide evidence that teaches elements as claimed in claims 10, 11, 24 and 25.

In response, Florencio et al (US 6,208,745) teaches "encoding step performs block transform coding" (col. 1, lines 58 – 67 and col. 4, lines 21 – 55) and "different

type of blocks" reads on (i.e. MPEG coding, which envolves different type of frames/blocks "I, B and P", col. 2, lines 45 – 48) and "monitoring ....." (i.e. fig. 3).

Therefore the previous rejection still applies for the same reason as set forth in the last Office Action (paper no. 6, dated 6/22/2004). The grounds are being restated for applicant convenience.

DETAILED ACTION

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keith et al (US 4,785,349).

Regarding claim 1, Keith '349 teaches the claim "improving video quality delivered to a display device" (i.e. col. 8, lines 1 – 4), and " estimating, as part of the encoding step, a time required for decoding the video signal segment at the display device" (i.e. fig. 1, abstract), and "estimated time exceeds a predetermined decoder time period" (i.e. col. 10, lines 57 – 65) performing one of, a) "re-encoding the current video signal segment such that it can be decoded within the decoder time period" and b) "encoding a subsequent video signal segment to enable decoding thereof without reference to the current segment" (i.e. col. 9, lines 63 – col. 10, lines 43). Keith '349 teaches the strategy for adjusting and controlling the threshold such that the video

signal can be decoded within the decoder time period, so that there is no need to repeat the video compression (col. 10, lines 34 – 38). Therefore, it would have been obvious to one skilled in the art that if it exceeds the threshold the repeating/re-encoding would be necessarily.

Regarding claims 2 – 3, Keith '349 teaches, "wherein only (step "a" is performed) re-encoding of the current signal is performed", and "wherein only the step (b) is performed" (col. 10, lines 3 – 45).

Regarding claims 4 and 18, Keith '349 teaches, "wherein estimating step models a decoder for the display device" (i.e. abstract, col. 10, lines 23 – 30).

Regarding claims 5 and 19, Keith '349 teaches, "wherein model uses components of the decoder that are also present in an encoder used for the current video signal segment encoding step" (i.e. col. 1, lines 48 – 65).

Regarding claims 6 – 8 and 20 – 22, the limitation "wherein estimating step uses existing motion estimation information obtained during the encoding step", and "model estimates a number of memory accesses required to decode the current video signal", and "estimates complexity of the current video signal" as claimed, are well-known in the prior art of the record, like MPEG process of encoding/decoding of the video signal.

Official Notice

Regarding claim 9, Keith '349 teaches, "model determines a number of compressed bits required by the current video signal" (i.e. fig. 2, col. 9, lines 63 – col. 10, lines 30).

Regarding claims 12 – 13 and 26, Keith '349 teaches, "display device is a synchronous display device" (i.e. fig. 1, display 36), and "video signal segment is part of a streaming video data stream" (abstract, lines 7 – 10).

Regarding claim 14, Keith '349 teaches, "machine readable computer ....." reads on (i.e. fig. 1, computer 28).

Regarding claims 15 and 27, the limitations claimed are substantially similar to claim 1; therefore the grounds for rejecting claim 1 also applies here

Regarding claims 16 – 17, the limitations claimed are substantially similar to claim 1, "encoder always encodes the current video signal segment such that it can be decoded within the decoded time period" and "if estimated time exceeds the predetermined decoder time period, the encoder always encodes a subsequent video signal segment to enable decoding thereof without reference to the current segment" and reads on (col. 10, lines 1 - 40).

Regarding claim 23, the limitations claimed, "determine number of compressed Bits required by the current video signal" are substantially similar to claim 9, and reads on (i.e. fig. 2, col. 9, lines 63 – col. 10, lines 30).

Regarding claims 10, 11, 24 and 25, the claimed "block transform coding" is Well-known process of compression and decompression of video signal in the prior art of the record (i.e. MPEG encoding/decoding process). Official Notice

Regarding claim 28, Keith '349 teaches, "communication path comprises streaming video server" (i.e. fig. 1).

Regarding claim 29, the claimed limitation "transcoder", reads on the combination of encoder and decoder. Therefore, it makes the limitations "portion of the encoder is contained in a "transcoder" obvious to one skilled in the art at the time of the invention was made.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703) 305-0132.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. B.S.

2/4/2005

CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600